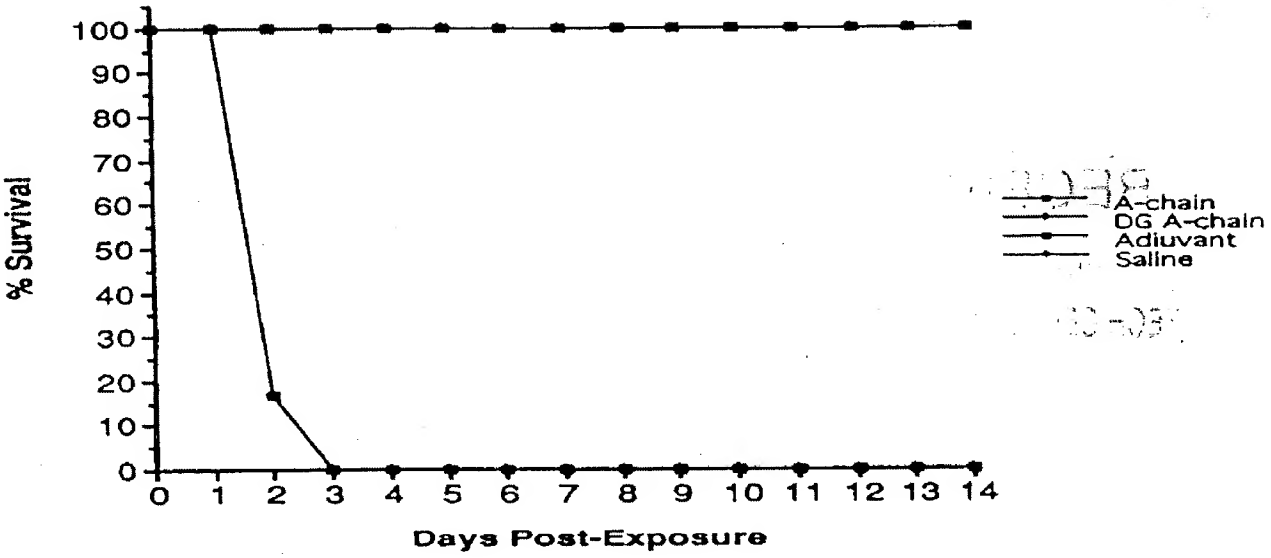
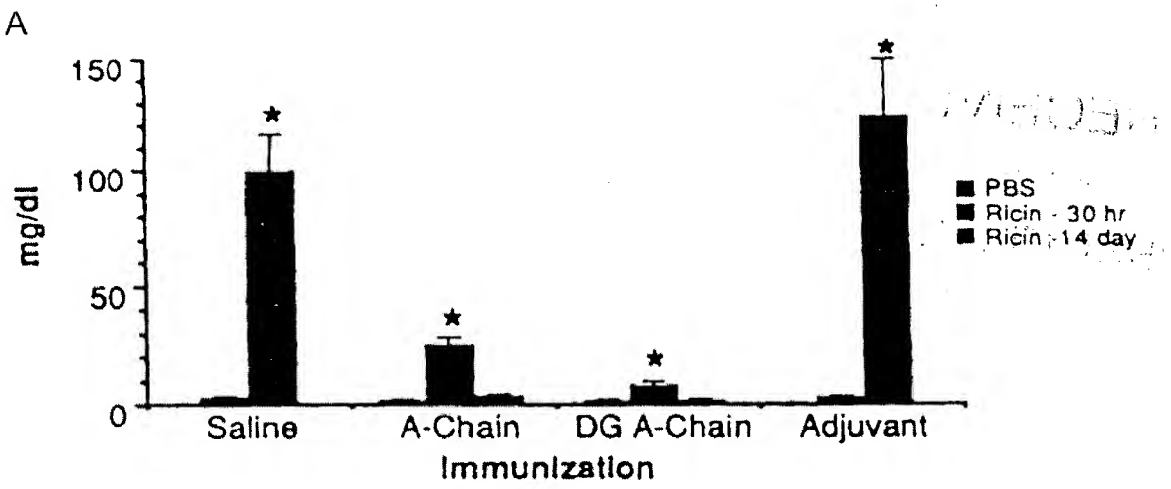
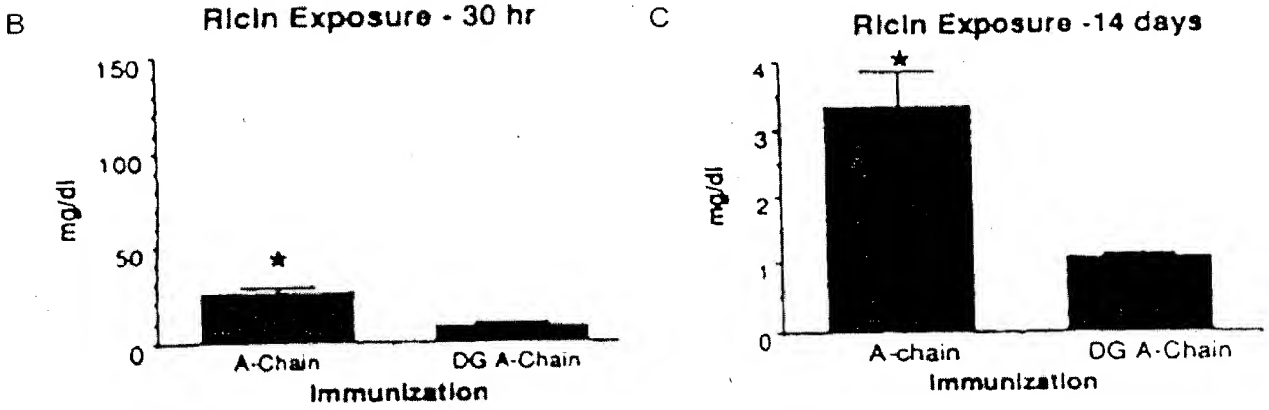
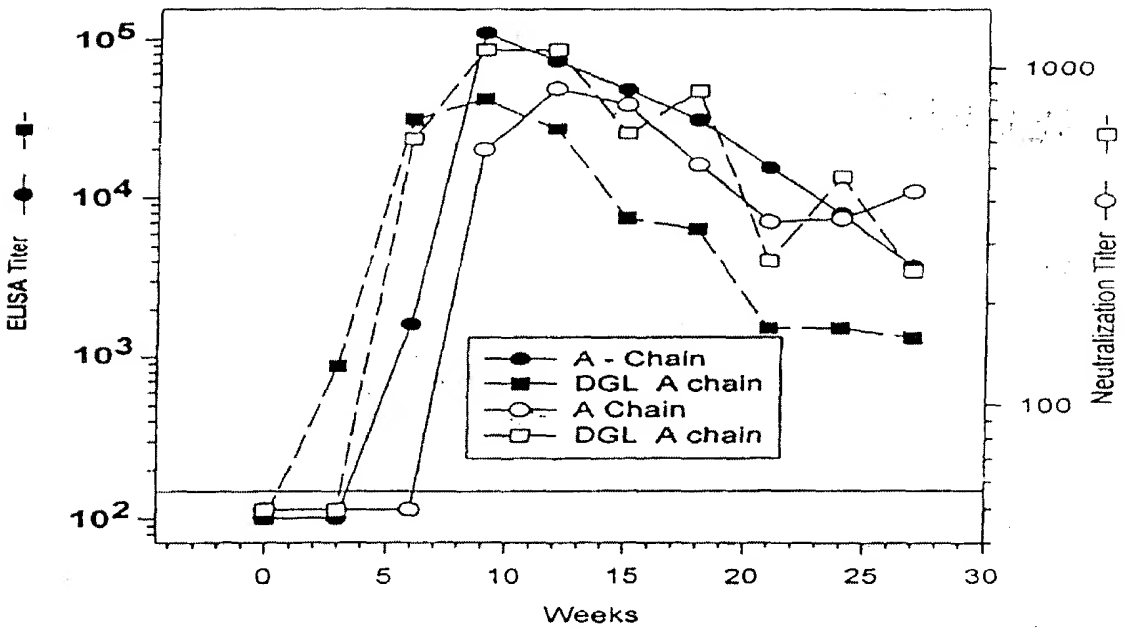

100
90
80
70
60
50
40
30
20
10
0
% Survival
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14
Days Post-Exposure
A-chain
DG A-chain
Adiuvant
Saline

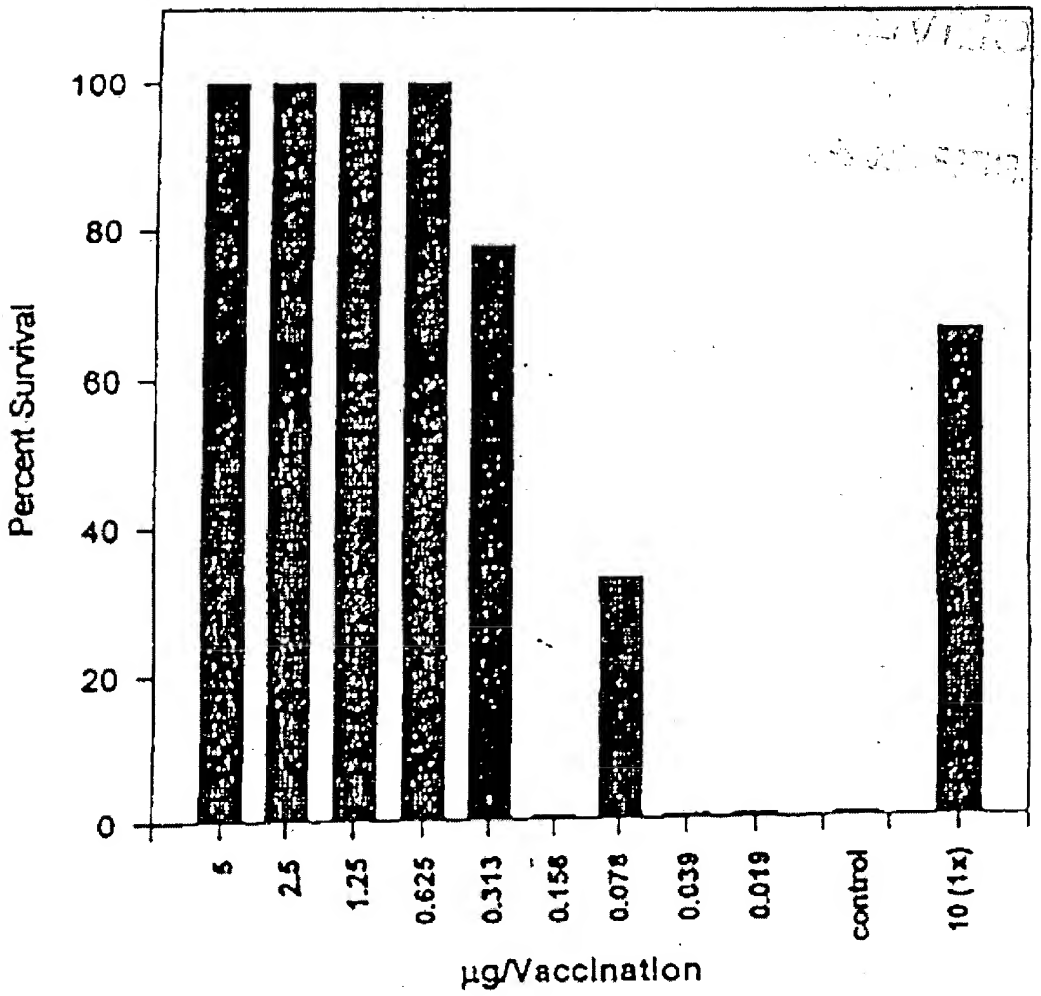


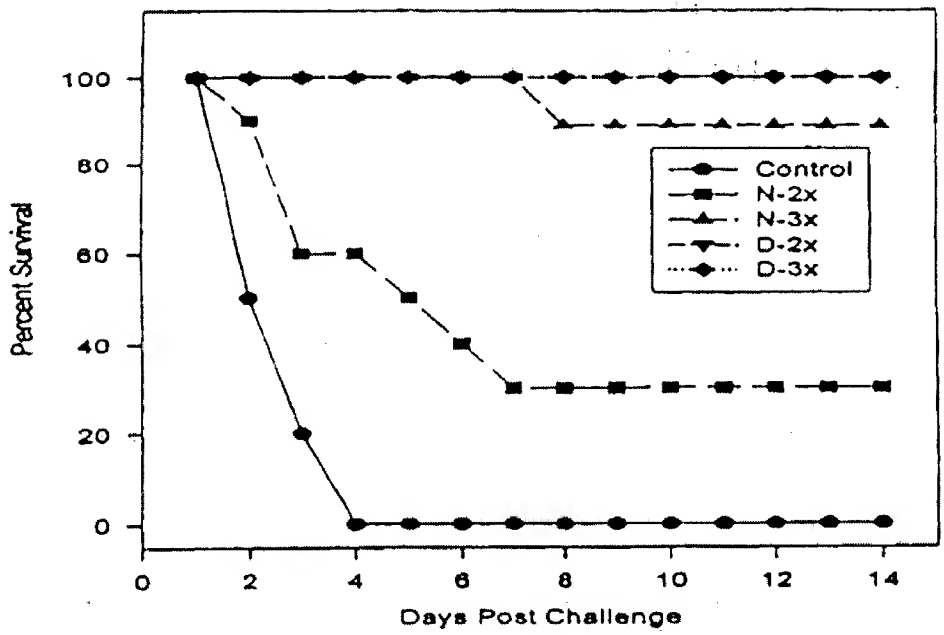


* = P < 0.05 (difference from PBS aerosol)
+ = P < 0.05 (difference from saline/adjuvant exposed to ricin aerosol)
S = P < 0.05 (difference between dgRTA and RTA exposed to ricin aerosol)

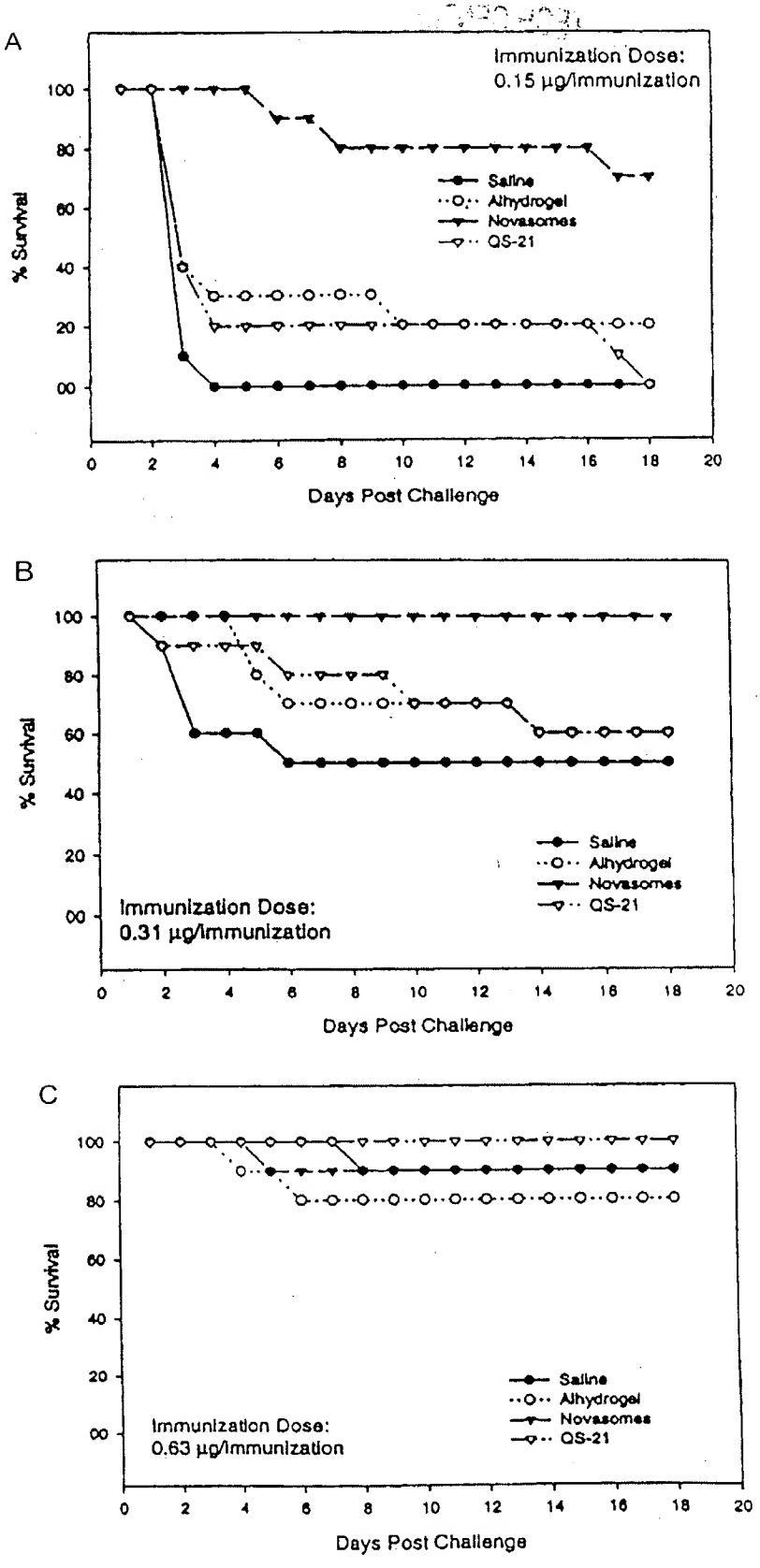


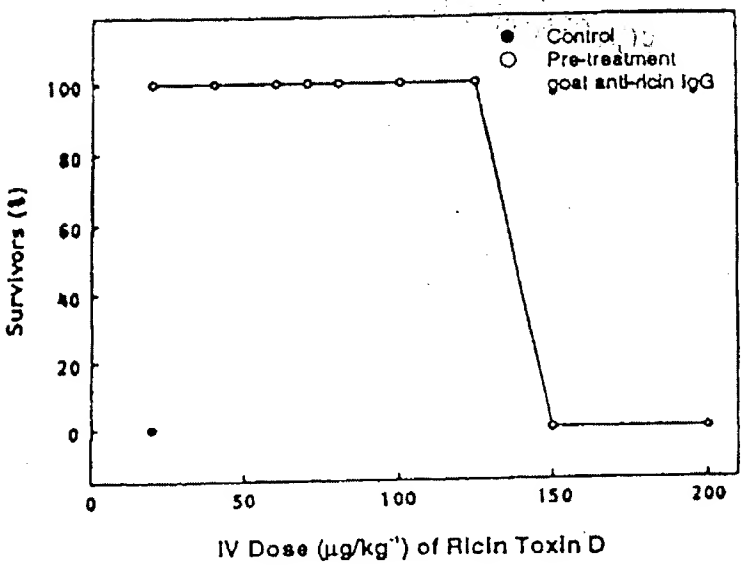
TOUETT 5T00560

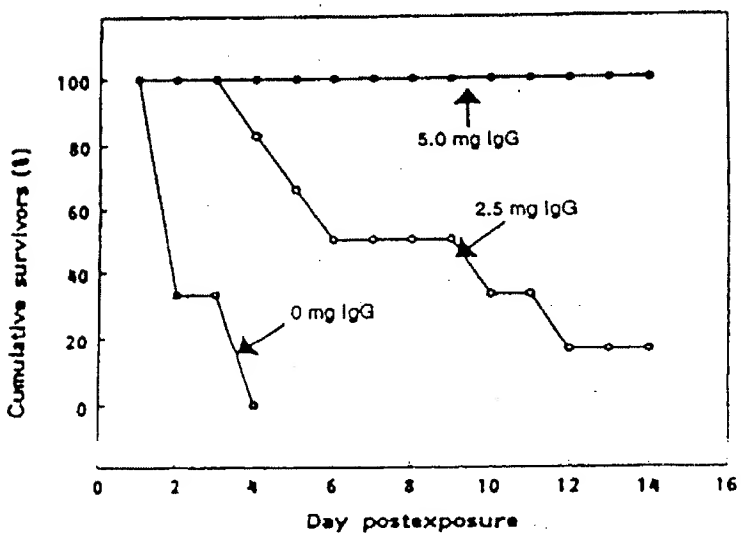

Percent Survival
100
80
60
40
20
0
5
2.5
1.25
0.625
0.313
0.156
0.078
0.039
0.019
control
10 (1x)
µg/Vaccination

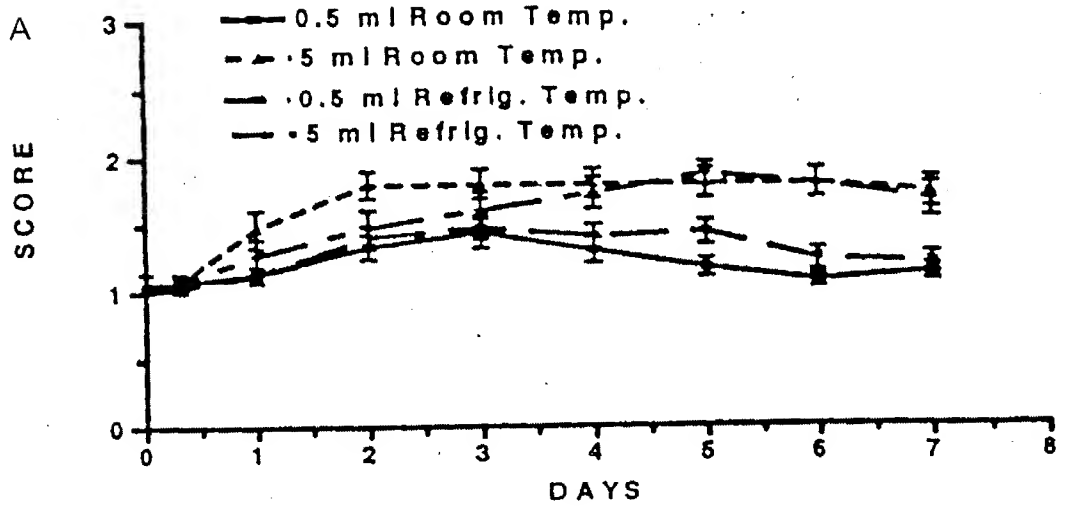


FOIA EFTA 00066660


A
Immunization Dose:
0.15 µg/Immunization
% Survival
Days Post Challenge
Saline
Alhydrogel
Novasomes
QS-21
B
Immunization Dose:
0.31 µg/Immunization
% Survival
Days Post Challenge
Saline
Alhydrogel
Novasomes
QS-21
C
Immunization Dose:
0.63 µg/Immunization
% Survival
Days Post Challenge
Saline
Alhydrogel
Novasomes
QS-21


Control
Pre-treatment
goat anti-ricin IgG
Survivors (%)
100
80
60
40
20
0
0
50
100
150
200
IV Dose (µg/kg⁻¹) of Ricin Toxin D


Cumulative survivors (%)
100
80
60
40
20
0
5.0 mg IgG
2.5 mg IgG
0 mg IgG
0
2
4
6
8
10
12
14
16
Day postexposure


A
SCORE
3
2
1
0
0.5 ml Room Temp.
.5 ml Room Temp.
0.5 ml Refrig. Temp.
.5 ml Refrig. Temp.
0
1
2
3
4
5
6
7
8
DAYS

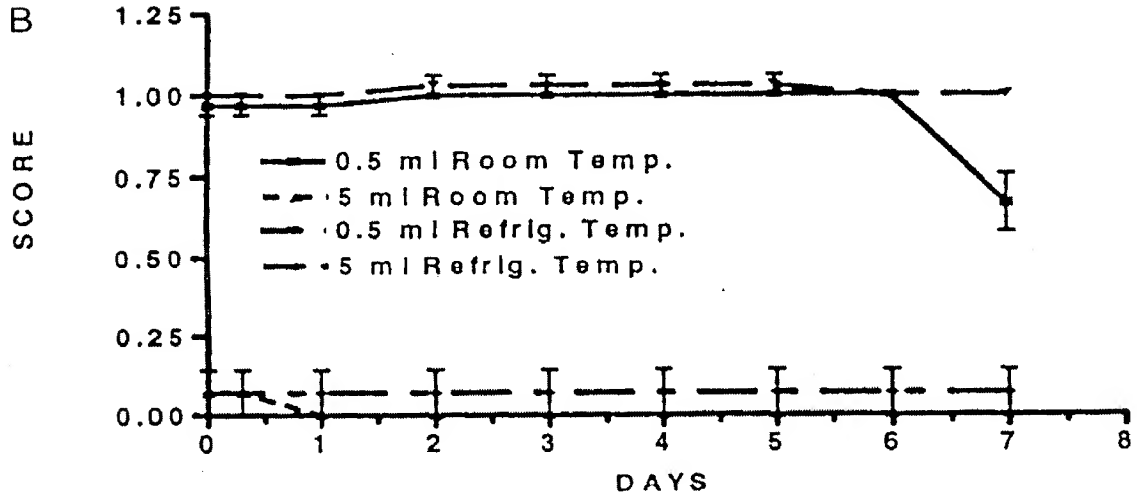
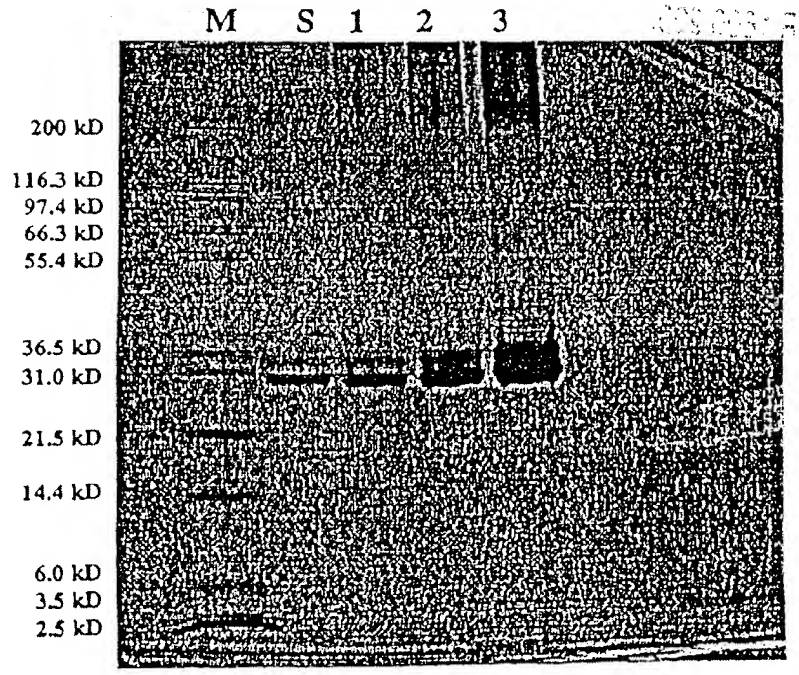

B
SCORE
1.25
1.00
0.75
0.50
0.25
0.00
0.5 ml Room Temp.
.5 ml Room Temp.
0.5 ml Refrig. Temp.
.5 ml Refrig. Temp.
0
1
2
3
4
5
6
7
8
DAYS

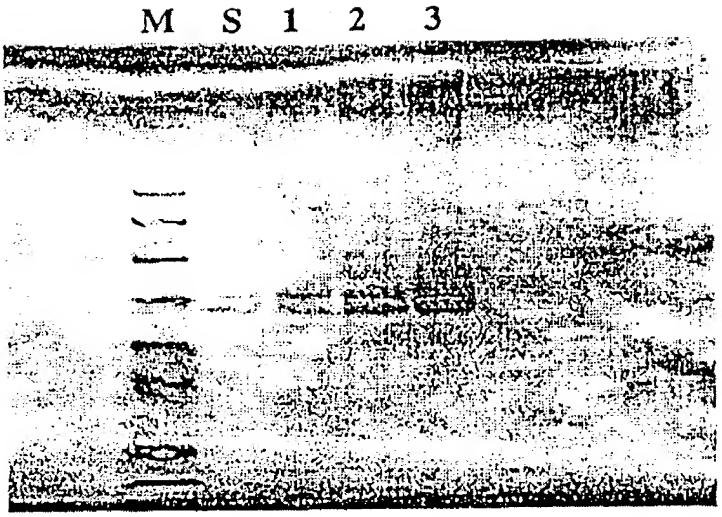
FIG. 5

RECEIVED



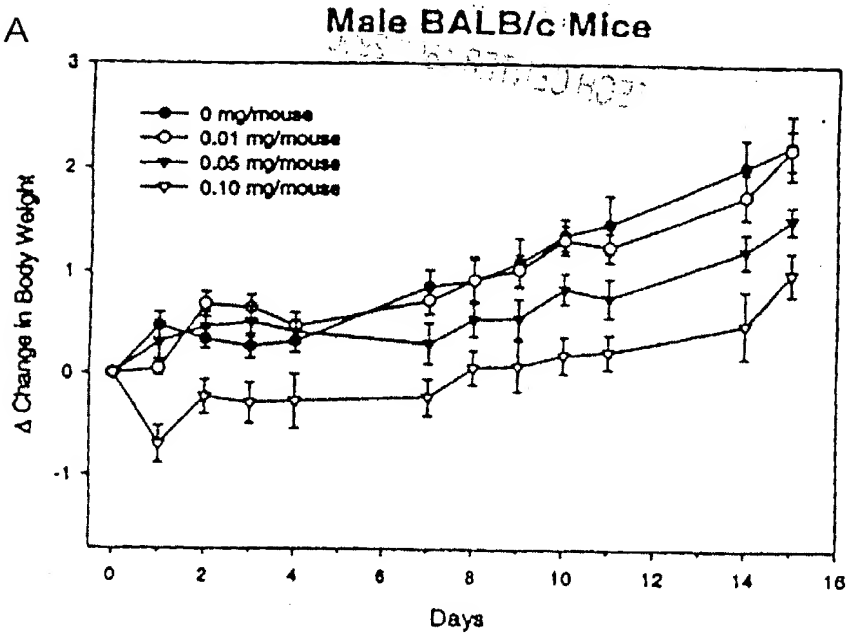
M – Mark 12 Protein Standard
S – 2.5-µg dgRTA Standard
1 – 2-µl Precipitate of dgRTA
2 – 5-µl Precipitate of dgRTA
3 – 10-µl Precipitate of dgRTA

EXHIBIT 5 PAGE 9 OF 19

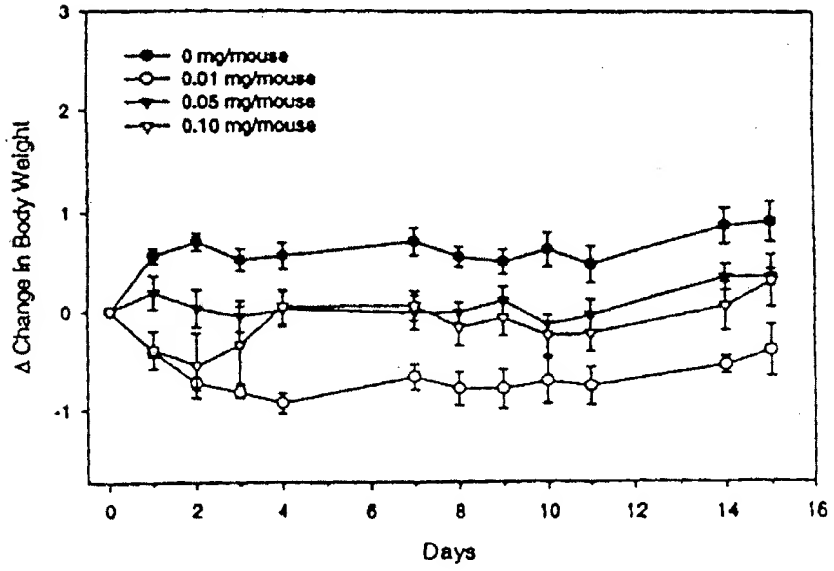


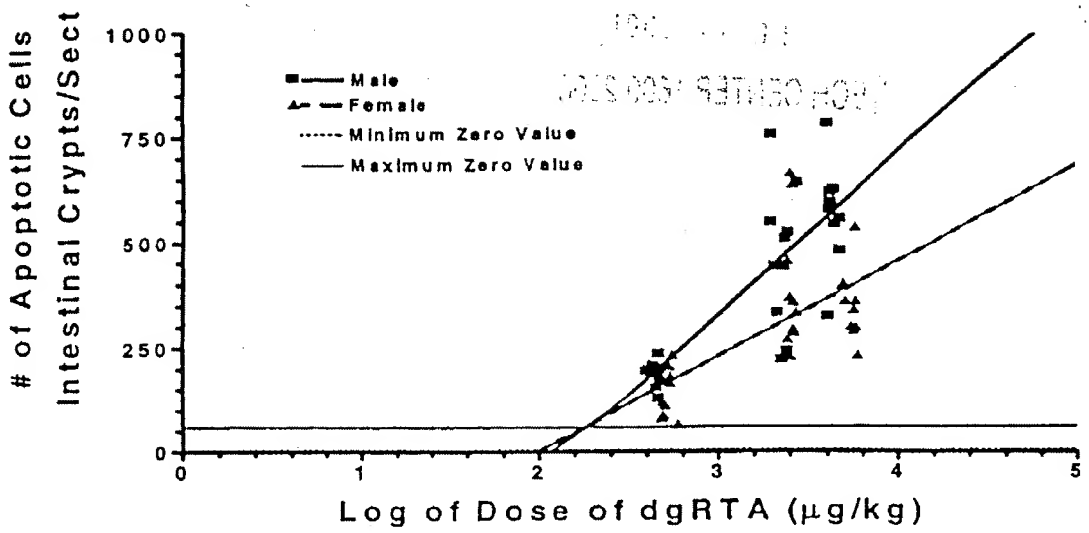
M – SeeBlue Pre-Stained Standard
S – 2.5 µg dgRTA Standard
1 – 2-µl Precipitate of dgRTA
2 – 5-µl Precipitate of dgRTA
3 – 10-µl Precipitate of dgRTA

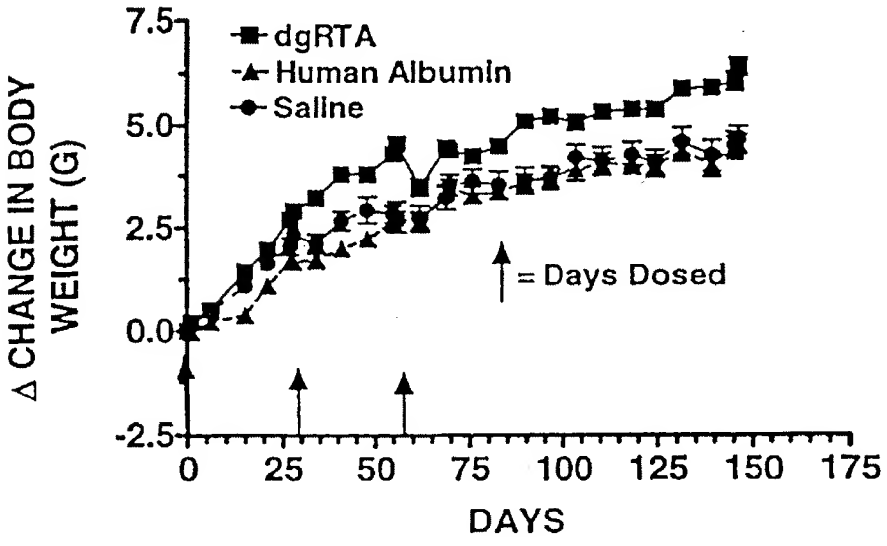
A

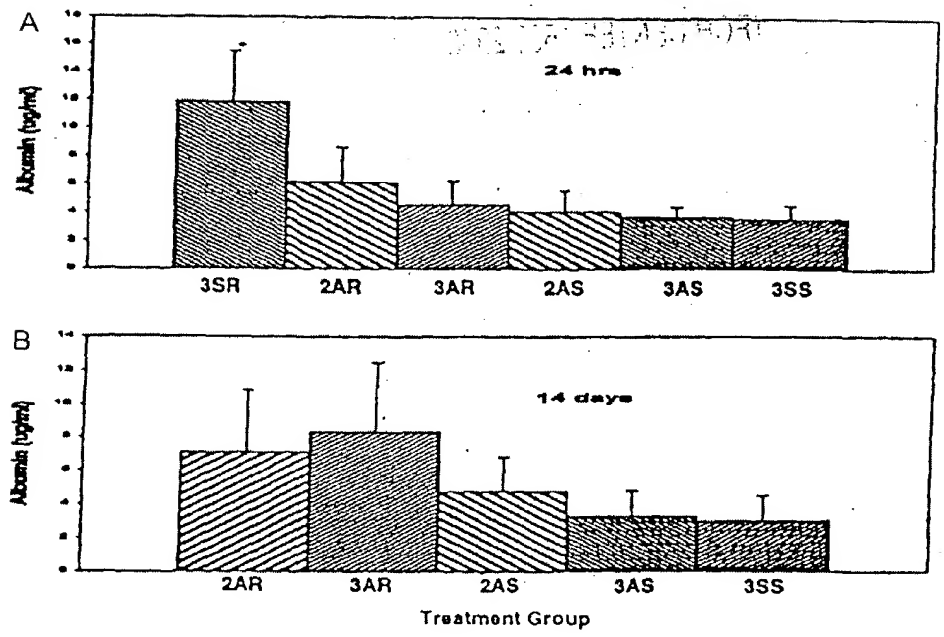

Male BALB/c Mice
0 mg/mouse
0.01 mg/mouse
0.05 mg/mouse
0.10 mg/mouse
Δ Change in Body Weight
Days

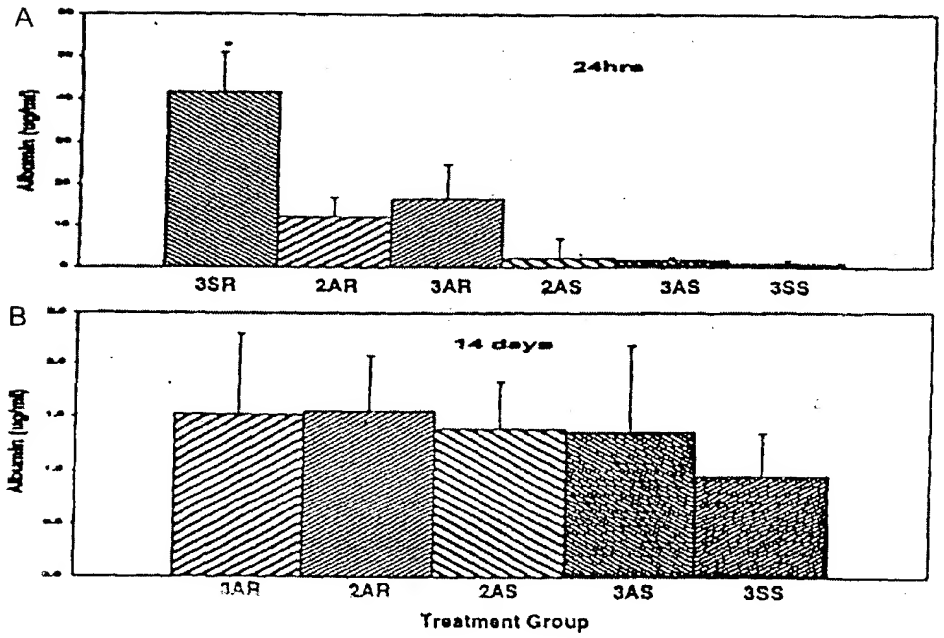
B

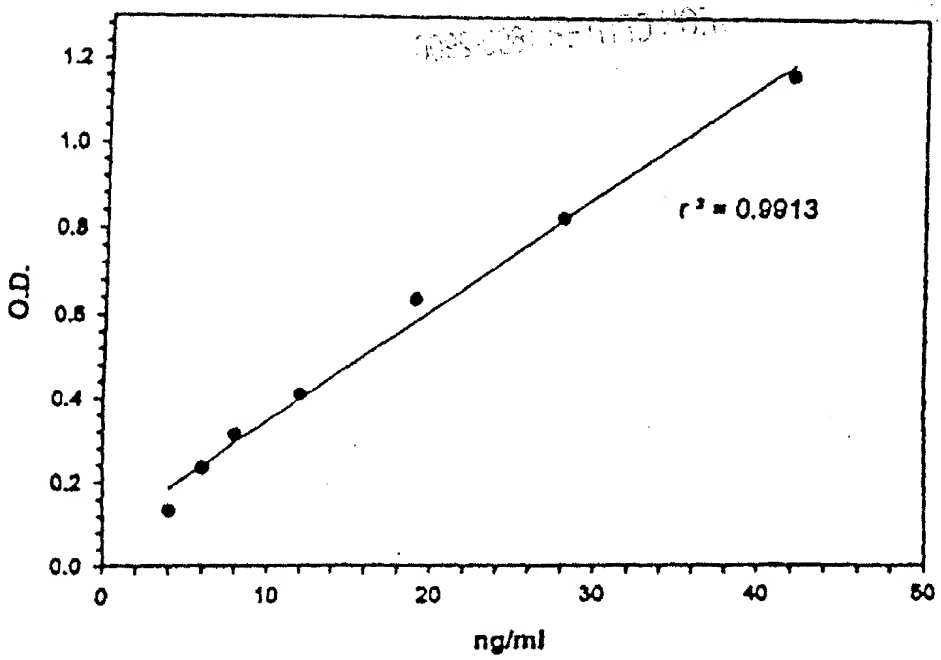

Female BALB/c Mice
0 mg/mouse
0.01 mg/mouse
0.05 mg/mouse
0.10 mg/mouse
Δ Change in Body Weight
Days

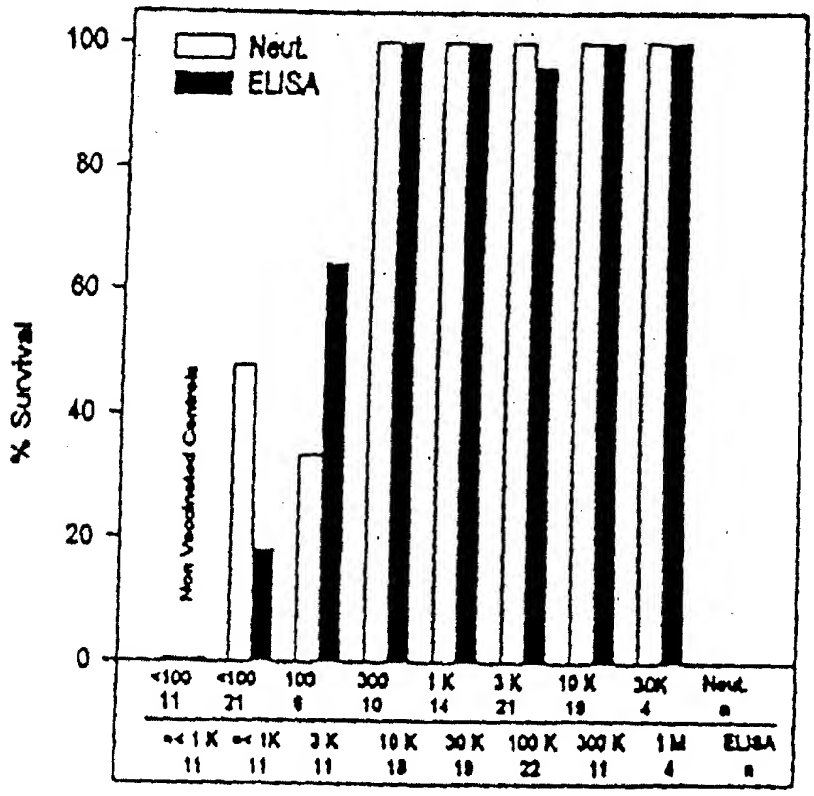

# of Apoptotic Cells
Intestinal Crypts/Sect
1000
750
500
250
0
Male
Female
Minimum Zero Value
Maximum Zero Value
0
1
2
3
4
5
Log of Dose of dgRTA (µg/kg)


Δ CHANGE IN BODY WEIGHT (G)
7.5
5.0
2.5
0.0
-2.5
dgRTA
Human Albumin
Saline
= Days Dosed
0
25
50
75
100
125
150
175
DAYS

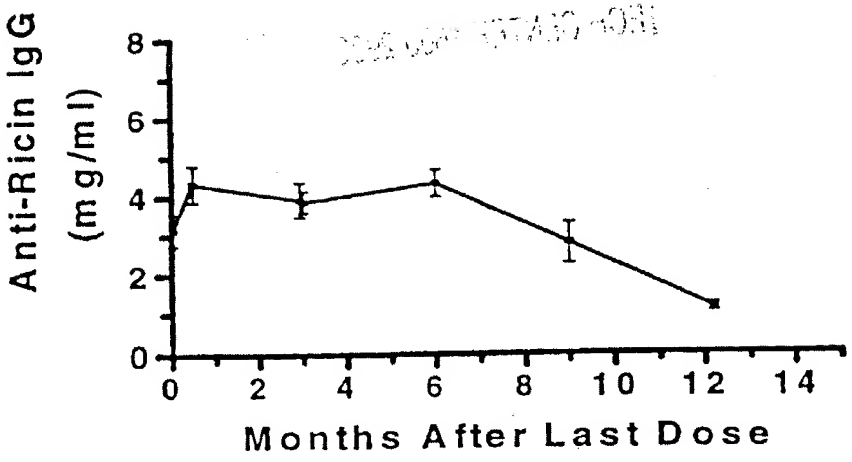

A
24 hrs
3SR
2AR
3AR
2AS
3AS
3SS
B
14 days
2AR
3AR
2AS
3AS
3SS
Treatment Group


A
24hrs
3SR
2AR
3AR
2AS
3AS
3SS
B
14 days
3AR
2AR
2AS
3AS
3SS
Treatment Group





Serum Titers


Anti-Ricin IgG
(mg/ml)
8
6
4
2
0
0
2
4
6
8
10
12
14
Months After Last Dose